IN THE CLAIMS:

1. (cancelled)

2. (currently amended) The power switching module as claimed in claim ~~1~~18, wherein said ~~lower~~ first passage and said ~~upper~~ second passage have two ends interconnected to form a single cooling medium circulation circuit.

3. (currently amended) The power switching module as claimed in claim 18~~1~~, wherein said ~~at least one~~first power ~~switch~~ switch and said at ~~least one other~~second power ~~switch~~ switch each include a single heatsink thermally connected to either one of said ~~lower~~ first wall~~walls~~ and said ~~upper walls~~second wall, each said heatsink being equipped with fins positioned so as to be in direct contact with the cooling medium circulating in at least one of said first channel, said second channel, said first passage, and said second passage~~said lower closed channels and in said upper closed~~ channels.

4. (currently amended) The power switching module as claimed in claim 3, wherein only said ~~upper~~ second wall of said at ~~least one~~first power switch includes a heatsink and only said ~~lower~~ second wall of said ~~at least one other~~second power switch includes a heatsink.

5. (currently amended) The power switching module as claimed in claim 3, wherein said fins of said heatsinks extend parallel to ~~the~~ a direction of circulation of the cooling medium.

6. (currently amended) The power switching module as claimed in claim 18~~1~~, wherein said ~~lower~~ first channel~~channels~~ and said ~~upper channels~~second channel are connected to each other to form a single cooling medium circulation circuit ~~along said upper wall of said at least one power switch and along said lower wall of said at least one other power switch~~.

7. (currently amended) The power switching module as claimed in claim 18~~1~~, wherein said ~~lower~~ first passage and said ~~upper~~ second passage have two ends interconnected to form a single cooling medium circulation circuit, ~~and~~ said ~~lower~~ first channel~~channels~~ and said ~~upper~~ second channel~~channels~~ are connected to each other to form a single cooling medium circulation circuit ~~along said upper wall of said at least one power switch and along said lower wall of said at least one other power switch~~, and each of said cooling medium circulation circuits is connected to the same pump to effect the circulation of said cooling medium in each of said cooling medium circulation circuits.

8. (currently amended) The power switching module as claimed in claim 18~~1~~, wherein at least one end of either one of said ~~upper~~ first passage and said ~~lower~~ second passage and at least one end of either one of said ~~lower closed channels~~ first channel and said ~~upper closed channels~~ second channel are connected to a common inlet connector for receiving the cooling medium and to a common outlet connector for discharging the cooling medium.

9. (currently amended) The power switching module as claimed in claim 18~~1~~, wherein said cooling medium is a liquid ~~such as water~~.

10. (currently amended) The power switching module as claimed in claim 18~~1~~ wherein said ~~at least one~~ first power switch and said ~~at least one other~~ second power switch each comprises:

- a plurality of transistors, said plurality of transistors each including an emitter, a gate and a collector; and
- first electrical tracks to which one of either said emitter and said gate of each of said plurality of transistors is ~~welded~~electrically connected, said first electrical tracks being formed on an inside surface of one of either said ~~upper~~ first wall~~walls~~ and said ~~lower walls~~ second wall ~~that is cooled by the cooling medium circulating in one of either said lower passage and said upper passage~~.

11. (currently amended) The power switching module as claimed in claim 10, wherein said ~~at least one~~first power switch and said ~~at least one other~~ second power switch further comprises second electrical tracks to which said collector of each of said plurality of transistors is ~~welded~~electrically connected, said second electrical tracks being formed on an inside surface of either one of said ~~upper~~ first wall~~walls~~ and said ~~lower walls~~second wall ~~that is cooled by the cooling medium circulating in one of either said lower closed channels and said upper channels~~.

12. (currently amended) The power switching module as claimed in claim ~~10~~11, wherein said gate and said emitter of each of said plurality of transistors are electrically connected to said first electrical tracks by molten weld cylinders and said collector of each of said plurality of transistors is electrically connected to said second electrical tracks by molten weld cylinders.

13. (currently amended) The power switching module as claimed in claim ~~18~~1, wherein a said spacer is substantially parallelepiped in shape ~~is positioned between said at least one power switch and said at least one power switch so that a predetermined distance is maintained between said at least one power switch and said at least one other power switch, and wherein said spacer~~and includes a housing for each of said at least ~~one power switch and said at least one other power switch~~first and second power switches.

14. (currently amended) The power switching module as claimed in claim 13, wherein said shape ~~of said spacer is such as to permit the open side of said lower channels and said upper channels to be sealed hermetically thereby~~spacer is shaped to hermetically seal an open side of each of said first and second channels.

15. (currently amended) The power switching module as claimed in claim ~~18~~1, wherein said ~~lower~~ first passage and said ~~upper~~ second passage have two ends interconnected to form a single cooling medium circulation circuit, and wherein a said spacer is substantially parallelepiped in shape is positioned between said ~~at least one~~first power switch and said ~~at least one other~~second power switch so that a predetermined distance is maintained between said ~~at least one~~first power switch and said ~~at least one other~~second power switch, and wherein said spacer includes a

housing for each of said ~~at least one~~first power switch and said ~~at least one other~~second power switch, and wherein said shape of said spacer is such as to permit the ~~an~~ open side of said ~~lower channels~~first channel and said ~~upper channels~~second channel to be sealed hermetically thereby, and wherein one cooling medium circulation circuit is formed inside said spacer, and wherein said ~~lower~~ first passage and said ~~upper~~ second passage are rectangular in cross-section and extend inside said spacer parallel to the longest side of said spacer.

16. (currently amended) The power switching module as claimed in claim ~~18~~1, wherein ~~the~~ a height of said ~~lower~~ first passage and of said ~~upper~~ second passage is not greater than 1 mm.

17. (original) A multiphase inverter in which each phase comprises two interrupters, and wherein said two interrupters of the same phase are comprised of a single power switching module, said single power switching module comprising a) at least one power switch placed above at least one other power switch, each power switch including upper walls and lower walls each adapted to be cooled through thermal conduction by a cooling medium, b) lower closed channels and upper closed channels configured to circulate a cooling medium along said lower walls and said upper walls, respectively, of said at least one power switch and of said at least one other power switch, and c) a lower passage in said power switching module along and above said upper wall of said at least one other power switch, and an upper passage in said power switching module along and below said lower wall of said at least one power switch such that said upper walls are cooled by circulating a cooling medium in said lower passage and said lower walls are cooled by circulating a cooling medium in said upper passage.

18. (new) A power switching module comprising:

a spacer having a first passage disposed on a first side of said spacer, and a second passage disposed on a second side of said spacer opposite said first side of said spacer, said first and second passages being configured to circulate a cooling medium;

at least one pair of power switches disposed along said spacer, each pair of power switches including:

a first power switch positioned on said first side of said spacer such that a first wall of said first power switch is cooled by said cooling medium in said first passage, and

a second power switch positioned on said second side of said spacer such that a first wall of said second power switch is cooled by said cooling medium in said second passage, wherein each of said first and second power switches includes a second wall opposite said first wall;

- a first channel positioned proximate said second wall of said first power switch such that said second wall of said first power switch is cooled by said cooling medium in said first channel; and
- a second channel positioned proximate said second wall of said second power switch such that said second wall of said second power switch is cooled by said cooling medium in said second channel.

19. (new) The power switching module as claimed in claim 18, wherein said at least one pair of power switches includes at least two pairs of power switches.

20. (new) The power switching module as claimed in claim 19, wherein said second walls of said first power switches are aligned in a first common plane, and said second walls of said second power switches are aligned in second common plane parallel to said first common plane.

21. (new) A power switching module comprising:

- a spacer having a first passage disposed on a first side of said spacer, and a second passage disposed on a second side of said spacer opposite said first side of said spacer, said first and second passages being interconnected to form a circulation circuit for a cooling medium;
- at least two pairs of power switches disposed along said spacer, each pair of power switches including:

a first power switch positioned on said first side of said spacer such that a first wall of said first power switch is cooled by said cooling medium in said first passage, and

a second power switch positioned on said second side of said spacer such that a first wall of said second power switch is cooled by said cooling

medium in said second passage, wherein each of said first and second power switches includes a second wall opposite said first wall;

- a first channel positioned proximate said second wall of said first power switch such that said second wall of said first power switch is cooled by said cooling medium in said first channel; and

- a second channel positioned proximate said second wall of said second power switch such that said second wall of said second power switch is cooled by said cooling medium in said second channel, wherein said first and second channels are interconnected to form another circulation circuit for said cooling medium.